



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,999	07/02/2001	Koichiro Kezuka	09792909-5106	1156

7590 07/13/2004

David R. Metzger  
SONNENSCHN NATH & ROSENTHAL  
P.O. BOX # 061080  
Wacker Drive Station, Sears Tower  
Chicago, IL 60606-1080

EXAMINER
----------

WILLS, MONIQUE M

ART UNIT	PAPER NUMBER
----------	--------------

1746

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/896,999	<b>Applicant(s)</b> KEZUKA ET AL.	
	<b>Examiner</b> Monique M Wills	<b>Art Unit</b> 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10,12-17 and 19-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-17 and 19-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Request for Continued Examination*

A Request for Continued Examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 1, 2004 has been entered.

The objection to the disclosure because of erroneously categorizing vanadium oxide as a metal sulfide is withdrawn. The rejection of claim 27, under 35 U.S.C. 112, second paragraph is overcome.

The following rejections are maintained:

- Claims 23-27, 42 & 44 under 35 U.S.C. 102(e) as being anticipated by Skotheim et al. U.S. Patent 6,482,545.
- Claims 23-26, 28, 31-33 & 42-44 under 35 U.S.C. 102(e) as being anticipated by Ochiai et al., U.S. Patent 6,569,572.
- Claims 1-3, 5-10, 12-17 & 19-21 under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., U.S. Patent 6,692,863 in view of Skotheim et al., U.S. Patent 6,482,545.
- Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., U.S. Patent 6,692,863 in view of Skotheim et al., U.S. Patent 6,482,545, as applied to claim 15, and further in view of Takami et al, U.S. Patent 6, 503,657.

- Claims 29 & 30 under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al., U.S. Patent 6,569,572, as applied to claim 23, and further in view of Nakanishi et al., U.S. Patent 6,692,863.
- Claims 36 & 37 under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al., U.S. Patent 6,569,572, as applied to claim 23, and further in view of Hamamoto et al, U.S. Patent 6,436,582.
- Claims 28, 31-36 & 38-41 under 35 U.S.C. 103(a) as being unpatentable over Skotheim et al. U.S. Patent 6,482,545 as applied to claim 23, and further in view of Takami et al., U.S. Patent 6,503,657.

#### *Claim Objections*

Claim 26 is objected to because of the following informalities: the status in the parenthetical should read "currently amended" instead of "previously presented" and the term "compounds soluble in metal oxides" should read "compounds soluble in metal oxides". Appropriate correction is required.

#### *Claim Interpretation*

According to Merriam Webster's Collegiate Dictionary, a "foil" is "a very thin sheet metal". Therefore, the Examiner will interpret metal sheets having diminutive "mm" thickness, such as 1 mm, a "foil".

*Information Disclosure Statement*

The information disclosure statements filed April 13, 2004 has/have been received and complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-27, 42 & 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Skotheim et al. U.S. Patent 6,482,545.

Skotheim teaches a non-aqueous electrolyte comprising (a) one or more solvents (b) one or more ionic salts and, (c) a multifunctional monomer comprising two or more unsaturated aliphatic reactive moieties per molecule (abstract).

With respect to claim 23, Skotheim teaches a battery comprising a positive electrode, negative electrode and an electrolyte with a multifunctional monomer (col. 8, lines 35-48). As to synthesizing the electrolyte polymer at 95°C or lower, the limitation is a product-by-process limitation rendering the same product as the prior art. The claim only differs from Skotheim's electrolyte polymer by its method of production. In accordance with MPEP 2113, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on

Art Unit: 1746

its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, since the process step is not given patentable weight, and the method limitation of claim 23 does not patentably distinguish the instant electrolyte polymer from Skotheim.

Concerning claims 24 & 25, the positive electrode comprises a mixture layer and an aluminum current collector (col. 24, lines 30-45).

In re claims 26 & 27, the cathode is vanadium oxide or a metal sulfide (col. 19, lines 50-60).

With respect to claims 42 & 44, the electrolyte contains an ether (col. 9, lines 40-48) and two or more polymerized functional groups in a molecule (abstract).

Therefore, the instant claims are anticipated by the prior art set forth.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-26, 28, 31-33 & 42-44 are rejected under 35 U.S.C. 102(e) as being

anticipated by Ochiai et al., U.S. Patent 6,569,572.

With respect to claims 23 & 42-44, Ochiai teaches a lithium battery comprising a positive electrode, negative electrode and electrolyte; wherein the electrolyte contains di(methyl)-acrylic ester compounds (col. 2, lines 45-65).

The limitation in claim 23, with respect to the electrolyte containing a multifunctional monomer, is considered to be an inherent property of the acrylic ester as set forth in the prior art, because Ochiai employs the same acrylic ester electrolyte additive set forth by Applicant. As to synthesizing the electrolyte polymer at 95°C or lower, the limitation is a product-by-process limitation rendering the same product as the prior art. The claim only differ from Ochiai's electrolyte polymer by its method of production. In accordance with MPEP 2113, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, since the process step is not given patentable weight, the method limitation of claim 23 does not patentably distinguish the instant electrolyte polymer from Ochiai.

The limitation in claim 44, with respect to the multifunctional monomer having more than two polymerized function groups in a molecule, is considered to be an inherent property of the acrylic ester as set forth in the prior art, because Ochiai employs the same acrylic ester electrolyte additive set forth by Applicant.

With respect to claims 24 & 25, the positive electrode comprises a mixture layer and an aluminum current collector (col. 11, lines 45-60).

Art Unit: 1746

With respect to claim 26, the cathode active material is  $\text{LiCoO}_2$  (col. 11, lines 50-60).

With respect to claim 28, the anode comprises a current collector (11) and an active material mixture (col. 11, lines 45-60).

With respect to claims 31-33, the anodic active material is carbon (col. 11, lines 45-60).

Therefore, the instant claims are anticipated by the prior art set forth.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-10, 12-17 & 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., U.S. Patent 6,692,863 in view of Skotheim et al., U.S. Patent 6,482,545.

With respect to claims 1,8 & 15, Nakanishi teaches a battery comprising a positive electrode, negative electrode and negative electrode collector plate with a two-layer structure including a copper layer and a metal layer that does not form an intermetallic compound with lithium (abstract). With respect to claims 2,3,9, 10, 16 & 17, the metal layer is a metal more noble than copper with respect to oxidation-reduction potential, such as nickel or chromium (col. 5, lines 40-41). In re claims 5,6, 12, 13, 19 & 20, the anodic material is a material capable of occluding and releasing lithium such as graphite, coke or carbon (col. 14,



lines 20-25). With respect to claims 7, 14 & 21, the cathodic material is a lithium composite oxide (col. 14, lines 15-20).

Nakanishi is silent to the electrolyte containing multifunctional monomers or synthesizing the polymer at 95°C or lower (claims 1, 8 & 15)

Skotheim teaches that it is conventional to employ multifunctional monomers in electrolytes to improve safety of the cell by rapidly polymerizing at elevated temperatures to increase the viscosity and internal resistance of the electrolyte (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the multifunctional monomers of Skotheim in the electrolyte of Nakanishi, because Skotheim teaches that multifunctional monomers improve safety of the cell by rapidly polymerizing at elevated temperatures to increase the viscosity and internal resistance of the electrolyte.

With respect to the collector layer of Nakanishi being a foil, the thickness of the collector plate is 1 mm (See Table 10), and therefore, by definition, is a foil.

As to synthesizing the electrolyte polymer at 95°C or lower, the limitations are product-by-process limitations rendering the same product as the prior art. The claims only differ from the referenced electrolyte polymer by their method of production. In accordance with MPEP 2113, “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, since the process steps are not given patentable weight,

Art Unit: 1746

the method limitations of claim 1, 8 & 15 do not patentably distinguish the instant electrolyte polymer from Nakanishi in view of Skotheim.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., U.S. Patent 6,692,863 in view of Skotheim et al., U.S. Patent 6,482,545, as applied to claim 15 above, and further in view of Takami et al, U.S. Patent 6, 503,657.

Nakanishi in view of Skotheim teach a battery comprising a multifunctional monomer as described herein above.

Nakanishi is silent to the casing comprising a polymer compound film, a metal film, and a polymer compound film laminated in that order.

Takami teaches that it is conventional to employ protective layers on both surfaces of the metal film casing of a non-aqueous lithium battery (col. 11, lines 1-5). The protective layers prevent the metal casing from being corroded by the non-aqueous electrolyte (col. 11, lines 5-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the protective layer assembly of Takami in the cell of Nakanishi, in order to prevent the metal casing from being corroded by the

non-aqueous electrolyte.

With respect to the collector layer of Nakanishi being a foil, the thickness of the collector plate is 1 mm (See Table 10), and therefore, by definition, is a foil.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29 & 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al., U.S. Patent 6,569,572, as applied to claim 23 above, and further in view of Nakanishi et al., U.S. Patent 6,692,863.

Ochiai teaches a battery comprising a multifunctional monomer as described hereinabove. The disclosure includes a negative electrode and current collector (col. 11, lines 50-60).

Ochiai is silent to a collector layer comprising a copper foil covering a metal, wherein the metal is not copper and does not form an alloy with lithium (claims 29 & 30).

Nakanishi teaches that it is conventional to employ negative current collectors comprising copper covering a metal that does not alloy with lithium (abstract), in order to improve current collector efficiency of the negative electrode (col. 3, lines 25-30).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the instant invention was made, to employ the negative current collector of Nakanishi comprising a copper covering a metal that does not alloy with lithium in the electrode layer of Ochiai, because Nakanishi teaches that such current collectors improve current collector efficiency of negative electrodes.

With respect to the collector layer of Nakanishi being a foil, the thickness of the collector plate is 1 mm (See Table 10), and therefore, by definition, is a foil.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al., U.S. Patent 6,569,572, as applied to claim 23 above, and further in view of Hamamoto et al, U.S. Patent 6,436,582.

Ochiai teaches a battery comprising a multifunctional monomer as described hereinabove. The disclosure includes a negative electrode comprising carbonaceous active material (col. 11, lines 50-60).

Ochiai is silent to an active material such as tin oxide (claims 36 & 37).

Hamamoto teaches the functional equivalence of carbonaceous material and

tin oxide as anodic material in lithium batteries.

Therefore, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the instant invention was made, because even though Ochiai does not teach tin oxide active material, Hamamoto teaches that carbonaceous material and tin oxide are art recognized equivalent materials for anodes in lithium batteries, and therefore, one having ordinary skill in the art would substitute one active material for the other.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28, 31-36 & 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotheim et al., U.S. Patent 6,482,545 as applied to claim 23 above, and further in view of Takami et al., U.S. Patent 6,503,657.

Skotheim teaches an electrolyte comprising a multifunctional monomer as described hereinabove. With respect to claims 31, 36 & 38, the anode contains a lithium intercalated polyacetylene, polyphenylenes or polypyrrole. With respect to claims 32-33, the anode is lithium intercalated carbon or lithium intercalated graphite (col. 21, lines 5-20). Regarding claims 34-35, the anodic lithium-aluminum alloy satisfies  $D_3E_tLi_u$ , when  $t=0$

(col. 2 1, lines 15-20). With respect to claims 39-41, the anode material includes lithium metal, lithium-tin or lithium-aluminum alloys (col. 2 1, lines 5-20).

Skotheim does not expressly disclose the anode having a current collector (claim 28).

Takami teaches that it is conventional to employ current collectors to carry active material (col. 5, lines 33-35).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the current collector of Takami in the anode of Skotheim, to collect current generated by the active material, support, and provide structural integrity to the negative electrode.

### *Response to Arguments*

Applicants assert that Skotheim does not anticipate claims 23-27, 42 & 44, because the reference is silent to a polymer compound used in the electrolyte that is synthesized by polymerization at 95°C or lower. This argument is not persuasive. The limitation is not distinguishable from the prior art, because, absent any evidence to the contrary, the final electrolyte composition of Skotheim appears to be identical to Applicants,. In accordance with MPEP 2113, “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, since the process steps are not given

patentable weight, the method limitations of the instant claims do not patentably distinguish the instant electrolyte polymer of Skotheim.

Applicants contend that Ochiai does not anticipate claims 23-26, 28, 31-33 & 42-44, because the reference is silent to radically polymerizing the electrolyte polymer after the electrolyte is injected into the battery. This argument is not persuasive. The limitations on which Applicant relies are not necessitated by the claims. It is the claims that define the claimed invention, and it is the claims, not the specifications that are anticipated or unpatentably. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ 2d 1064.

With respect to objective evidence of nonobviousness, Applicant asserts, that the subject invention satisfies *long felt but unsolved needs*, by providing a new and improved polymer gel composition that is both aesthetically-pleasing and functionally-appropriate for a variety of applications including deodorizing gels, insect repelling gels and the like. This argument is not persuasive for two reasons. First, in accordance with MPEP §716.06(a), “secondary evidence” must be related to the claimed invention. To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n.42 (Fed. Cir. 1985). In the instant case, the secondary considerations are not relevant to the subject matter as claimed because, although the gel may be aesthetically-pleasing and functionally-appropriate as a clear gel that remains clear after the addition of perfumes and insecticides, the claims are drawn to a battery. The advantages of the gel as a deodorizer or insect repellent does not appear to be relevant to an electrochemical cell. Second, the secondary considerations provided, are objective evidence without any

probative value. According to MPEP §716.01(c), *solutions of a long-felt need* is objective evidence, which must be factually supported by an appropriate affidavit or declaration. See, *In re De Blauwe*, 736 F.2d 699m 705, 22USPQ 191, 196 (Fed. Cir. 1984). Applicant merely provides attorney arguments as proof of the instant electrolyte providing *a solution of long-felt need*. However, arguments of counsel cannot take the place of evidence in the record, *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). Therefore, Applicants must provide secondary evidence that is both relevant to the subject matter claimed and, in the instant case, provide actual proof of *solving long term need* to be of probative value and considered non-obvious over the prior art of record.

Regarding Nakanishi, Skotheim and Ochiai being non-obvious because the references do not expressly disclose synthesizing the polymer at temperature of 95°C or lower, the presence of process limitations in product claims, where the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to the product. *In re Stephens* 145 USPQ 656 (CCPA 1965).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



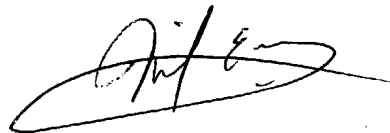
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

07/10/04

**MICHAEL BARR**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read "Michael Barr", written over a horizontal line.